

# Work Order ID 52784

October 14, 2009 10:41:36 AM



Page 1

Item ID: D412-742-043

Accept



Setup Start



Revision ID: H

Stop



Item Name: Replacement Float Skidtube

Start Date: 14/10/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 02/11/2009 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

*RA*

Date:

*02-10-14*

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3391	Rev H								

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

If D412-742-043 is a W/O on it's own,  
Photocopy bluefile and create labels per PPP D412-742-043 CHG004

*N/A*

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Page 2

Item ID: D412-742-043

Accept



Setup Start



Revision ID: H

Stop



Item Name: Replacement Float Skidtube

Start Date: 14/10/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 02/11/2009 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

110

0.00



HandFinish

HandFinishing

Memo

0.00

Hand Finishing

\*\*\*\*\*Do not apply LPS, see QC for more info\*\*\*\*\*

1-Spray inside tube of D3391-021/-023/-025 with LPS-3 as per Dwg D3391

A/R LPS-3 ☐ \_\_\_\_\_

2-Install tubes together and seal them all the way around using Sikaflex 241/291. Ensure tube ends line-up with saddle holes for proper alignment. using 7/16" "T" Pins.

A/R ☐ Sikaflex-241/-291 ☒ M112391

Expiry date: ☐ 10/20

3-Install wearplates as per Dwg D3391. Ensure that plastic washers are against wearplate, then topped with the SS washer. Coat bolts with LPS "procyon". Seal all bolts with sikaflex except ones with inserts on inside of tube ,hand tighten only bolts with no sikaflex

A/R ☐ LPS Procyon ☒ M104251

A/R ☐ Sikaflex-241/-291 ☒ M112391

Expiry date: ☐ 10/20

4-Remove "T" pins once sikaflex is dry.

5-Coat all exposed hardware with LPS Procyon. Remove any excess off with MEK degreaser.

BR 02-11-3

(PB) =>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D412-742-043 PAR #: N/P Fault Category: Finishing NCR: Yes No DQA: 8 Date: 09-11-06  
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: 8 Date: 09-11-08

NCR: 52784		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
9/11/03	1 ND	During assembly one insert was <del>striker</del> stripes. During removal of Bolt the wear plate D3564-3 was scraped (damaged beyond repair).	<u>DB</u> <u>09-11-04</u>	- SCRAP Damaged wear Plate D3564-3 - Replace D3564-3 <u>B*146652</u>	<u>BR</u> <u>09-11-04</u>	<u>S</u> <u>09/11/04</u>	<u>DB</u> <u>09-11-04</u>	<u>S</u> <u>09/11/03</u>
		RL process.						

NOTE: Date & initial all entries

**Work Order ID 52784**

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Item ID: D412-742-043

Accept



Setup Start



Revision ID: H

Stop



Item Name: Replacement Float Skidtube

Start Date: 14/10/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 02/11/2009 Req'd Qty: 1.00

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120  QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00  0.00	2) Serial 63						
130  Packaging Packaging	Packaging  Memo Identify and pack for shipping as per PPP D412-742-043 Location: _____ PPP Rev: <u>PPP 5278</u>	0.00  0.00							
140  QC Quality Control	QC21- Final Inspection - Work Order Release  Memo	0.00  0.00							<u>09/11/05</u>  MF 69-11-05

# Picklist Print

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Page 1

Work Order ID: 52784

Parent Item: D412-742-043RevH

Parent Item Name: Replacement Float Skidtube


Comments:

Start Date: 14/10/2009

Required Date: 02/11/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN3C4A 		Purchased	No			110	Each	2,216.000	24.0000			
BOLT												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST	2216
112082	14
112314	40
112720	162
112724	500
112794 ✓	1000
112829	500

24 BR 09-11-3

AN3C6A Purchased

No

110

Each

948.0000

12.0000



BOLT

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST	948
111982 ✓	948

12 BR 09-11-3.

# Picklist Print

Page 2

October 14, 2009 10:41:42 AM

Work Order ID: 52784

Parent Item: D412-742-043RevH

Parent Item Name: Replacement Float Skidtube


Comments:

Start Date: 14/10/2009

Required Date: 02/11/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN3C7A 		Purchased	No			110	Each	289.0000	8.0000			
BOLT												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

289

105906

21

107376 ✓

268

AN960C10L

Purchased

No

110

Each

4,772.000

44.0000



washer

Warehouse Loc Qty Loc Code

Location

OFFSHORE

FG

100

103585

100

Main Warehouse

ST

4672

112116 ✓

1009

112612

3663

D3391-021RevH

Manufactured

No

110

Each

0.0000

1.0000



Fwd Tube Assembly

*N*  
*A*

*pulled on*

*48248*

*w/o 52794 (D3391-023)*

*mf 09-11-05*

*8 BK 09-11-3.*

*44. BK 09-11-3*

*BK 09-11-3.*

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Shop Packet Print

Page 2

# Picklist Print

Page 3

October 14, 2009 10:41:42 AM

Work Order ID: 52784



Parent Item: D412-742-043RevH



Parent Item Name: Replacement Float Skidtube

Start Date: 14/10/2009

Required Date: 02/11/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3391-023RevH		Manufactured	No			110	Each	1.0000	1.0000			
Mid Tube Assembly												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

52794

BR 09-11-3.

ST

1

40522

1

D3391-025RevH

Manufactured

No

110

Each

2.0000

1.0000



Aft Tube Assembly

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

50102

2

39129

1

48122

1

BR 09-11-3.

# Picklist Print

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Work Order ID: 52784



Parent Item: D412-742-043RevH



Parent Item Name: Replacement Float Skidtube



Start Date: 14/10/2009

Required Date: 02/11/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3564-1RevD		Manufactured	No			110	Each	29.0000	1.0000			
												
Wearshoe												

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
OFFSHORE		
FG	2	
33798	2	
Main Warehouse		
ST	27	
47531	1	
48163✓	4	
50270	1	
51676	21	

1 BL 09-11-3.



# Picklist Print

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Parent Item: D412-742-043RevH



Parent Item Name: Replacement Float Skidtube

Start Date: 14/10/2009

Required Date: 02/11/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
*D3564-3RevD 		Manufactured	No			110	Each	20.0000	1.0000			

Wearshoe

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
OFFSHORE		
FG	2	
33764	2	
Main Warehouse		
FP	11	
50113	11	
Main Warehouse		
ST	7	
46445	1	
46652 ✓	3	
50364	3	

BR 09-11-3.

# Picklist Print

October 14, 2009 10:41:42 AM

Work Order ID: 52784



Parent Item: D412-742-043RevH



Parent Item Name: Replacement Float Skidtube

Start Date: 14/10/2009

Required Date: 02/11/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3564-5RevD		Manufactured	No			110	Each	30.0000	1.0000			

Wearshoe

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
OFFSHORE		
FG	2	
34806	2	
Main Warehouse		
FP19	26	
51655 ✓	15	
51925	11	
Main Warehouse		
ST	2	
45824	1	
47433	1	

1 PK 09-11-3.

# Picklist Print

October 14, 2009 10:41:42 AM

Work Order ID: 52784



Parent Item: D412-742-043RevH



Parent Item Name: Replacement Float Skidtube

Start Date: 14/10/2009

Required Date: 02/11/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3566-1RevC		Manufactured	No			110	Each	11.0000	2.0000			

Gasket

Warehouse  
Location

Loc Qty

Loc Code

Main Warehouse

FP

3

51612

3

Main Warehouse

ST

8

46349

1

51218

1

51259

3

52313

3

52512

2 BR 09-11-3

# Picklist Print

October 14, 2009 10:41:42 AM

Work Order ID: 52784

Parent Item: D412-742-043RevH

Parent Item Name: Replacement Float Skidtube

Comments:

Start Date: 14/10/2009

Required Date: 02/11/2009

Start Qty: 1.00

Required Qty: 1.00

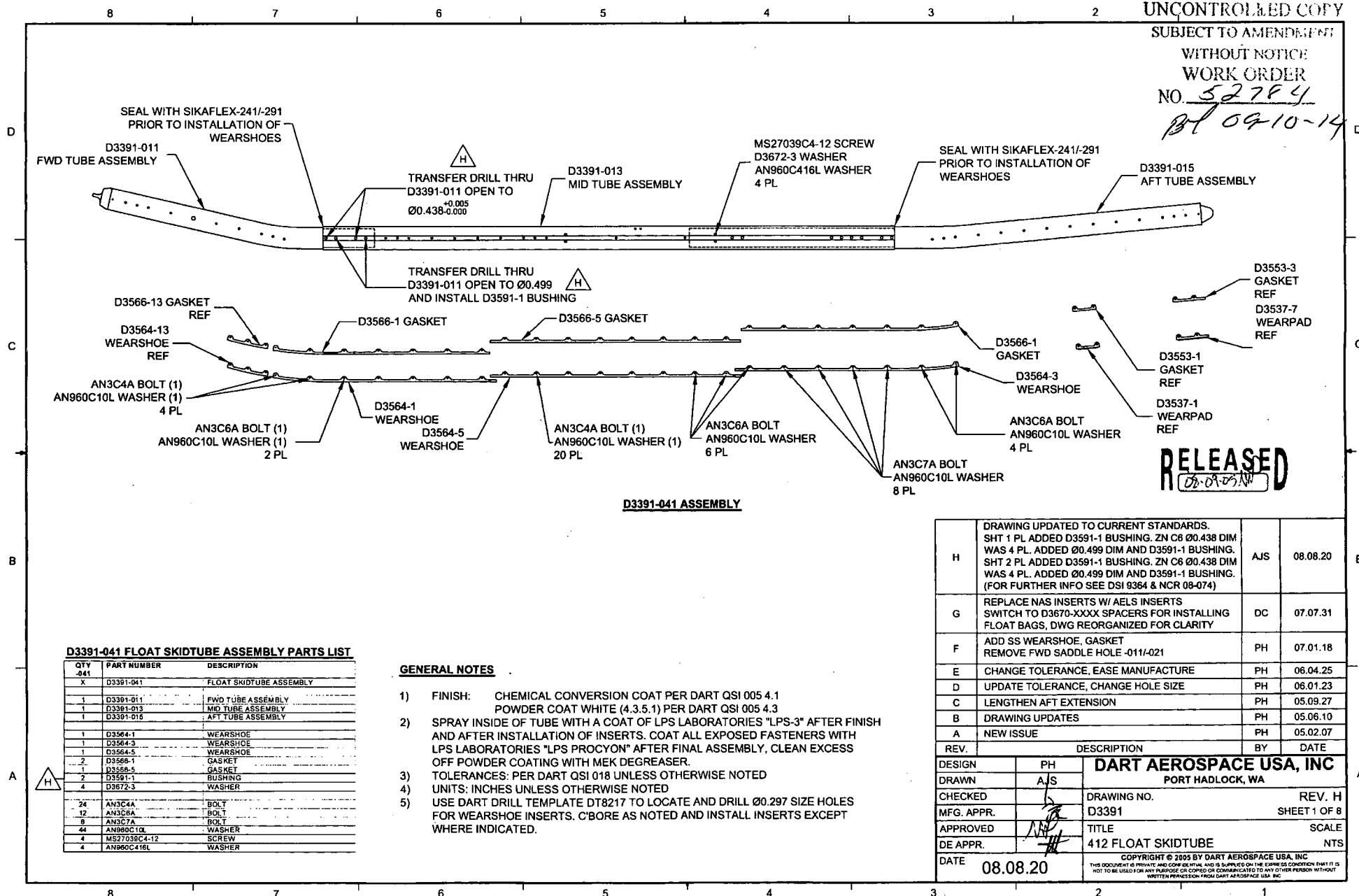
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3566-5RevC		Manufactured	No			110	Each	25.0000	1.0000			

Gasket

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
FP	12	
51929	12	
Main Warehouse		
FP19	9	
51669	9	
Main Warehouse		
ST	4	
36113	1	
46186	1	
47318	1	
51260	1	

1 BL 09-11-3.

SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 52784  
0910-14



D3391-041 ASSEMBLY

D3391-041 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

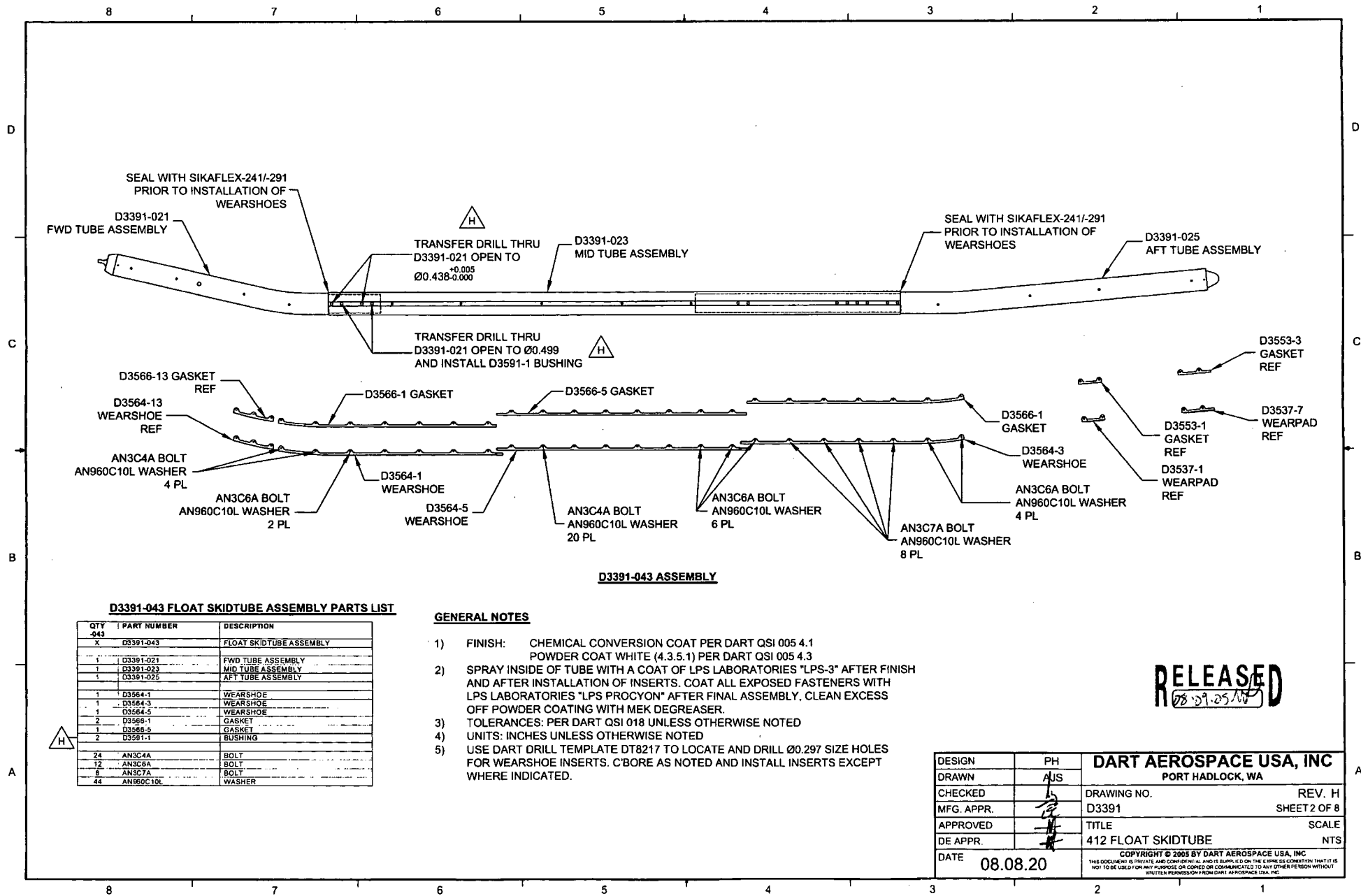
QTY	PART NUMBER	DESCRIPTION
X	D3391-041	FLOAT SKIDTUBE ASSEMBLY
1	D3391-011	FWD TUBE ASSEMBLY
1	D3391-013	MID TUBE ASSEMBLY
1	D3391-015	AFT TUBE ASSEMBLY
1	D3564-1	WEARSHOE
1	D3564-3	WEARSHOE
1	D3564-5	WEARSHOE
2	D3566-1	GASKET
2	D3566-5	GASKET
4	D3672-3	WASHER
24	AN3C4A	BOLT
12	AN3C6A	BOLT
6	AN3C7A	BOLT
44	AN960C10L	WASHER
4	MS27039C4-12	SCREW
4	AN960C416L	WASHER

GENERAL NOTES

- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.

H	DRAWING UPDATED TO CURRENT STANDARDS. SHT 1 PL ADDED D3591-1 BUSHING. ZN C6 Ø0.438 DIM WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. SHT 2 PL ADDED D3591-1 BUSHING. ZN C6 Ø0.438 DIM WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. (FOR FURTHER INFO SEE DSI 9364 & NCR 08-074)	AJS	08.08.20
G	REPLACE NAS INSERTS W/ AELS INSERTS SWITCH TO D3670-XXXX SPACERS FOR INSTALLING FLOAT BAGS, DWG REORGANIZED FOR CLARITY	DC	07.07.31
F	ADD SS WEARSHOE, GASKET REMOVE FWD SADDLE HOLE -011/-021	PH	07.01.18
E	CHANGE TOLERANCE, EASE MANUFACTURE	PH	06.04.25
D	UPDATE TOLERANCE, CHANGE HOLE SIZE	PH	06.01.23
C	LENGTHEN AFT EXTENSION	PH	05.09.27
B	DRAWING UPDATES	PH	05.06.10
A	NEW ISSUE	PH	05.02.07
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 1 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
DATE	08.08.20	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT IT BEING OBSOLETE. NO INFO IS TO BE RELEASED.	

w/o 52784



**D3391-043 ASSEMBLY**

**D3391-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST**

QTY	PART NUMBER	DESCRIPTION
1	D3391-043	FLOAT SKIDTUBE ASSEMBLY
1	D3391-021	FWD TUBE ASSEMBLY
1	D3391-023	MID TUBE ASSEMBLY
1	D3391-025	AFT TUBE ASSEMBLY
1	D3564-1	WEARSHOE
1	D3564-3	WEARSHOE
1	D3564-5	WEARSHOE
2	D3566-1	GASKET
1	D3566-5	GASKET
2	D3566-13	BUSHING
24	AN3C4A	BOLT
12	AN3C6A	BOLT
8	AN3C7A	BOLT
44	AN960C10L	WASHER

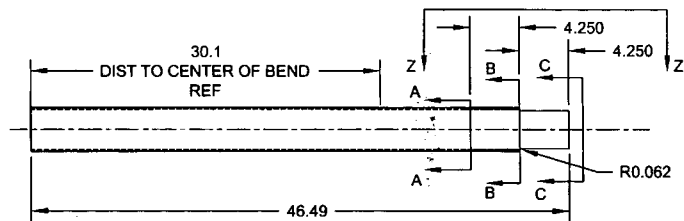
**GENERAL NOTES**

- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
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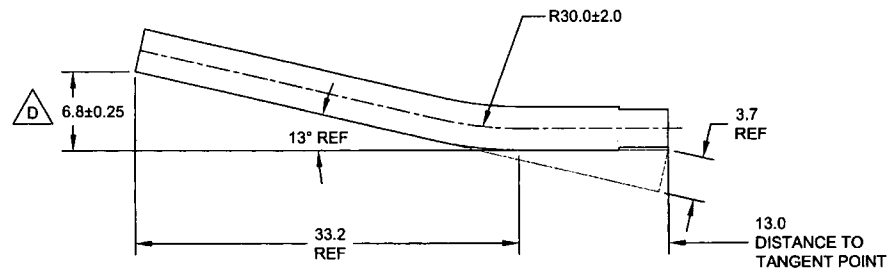
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08-09-25/AN

DESIGN	PH	<b>DART AEROSPACE USA, INC</b>	
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CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 2 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
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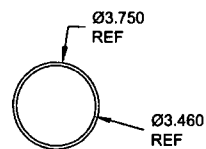
W/O 52784



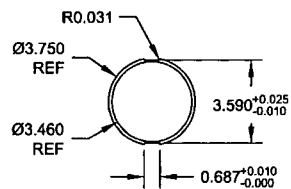
**D3391-1 CUTTING DETAIL**  
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



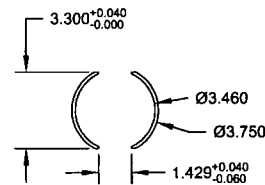
**D3391-011/-021 BENDING DETAIL**  
(MAKE FROM D3391-1)



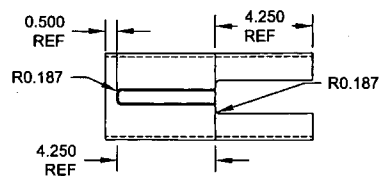
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SCALE 2X



**SECTION B-B**  
SCALE 2X



**SECTION C-C**  
SCALE 2X

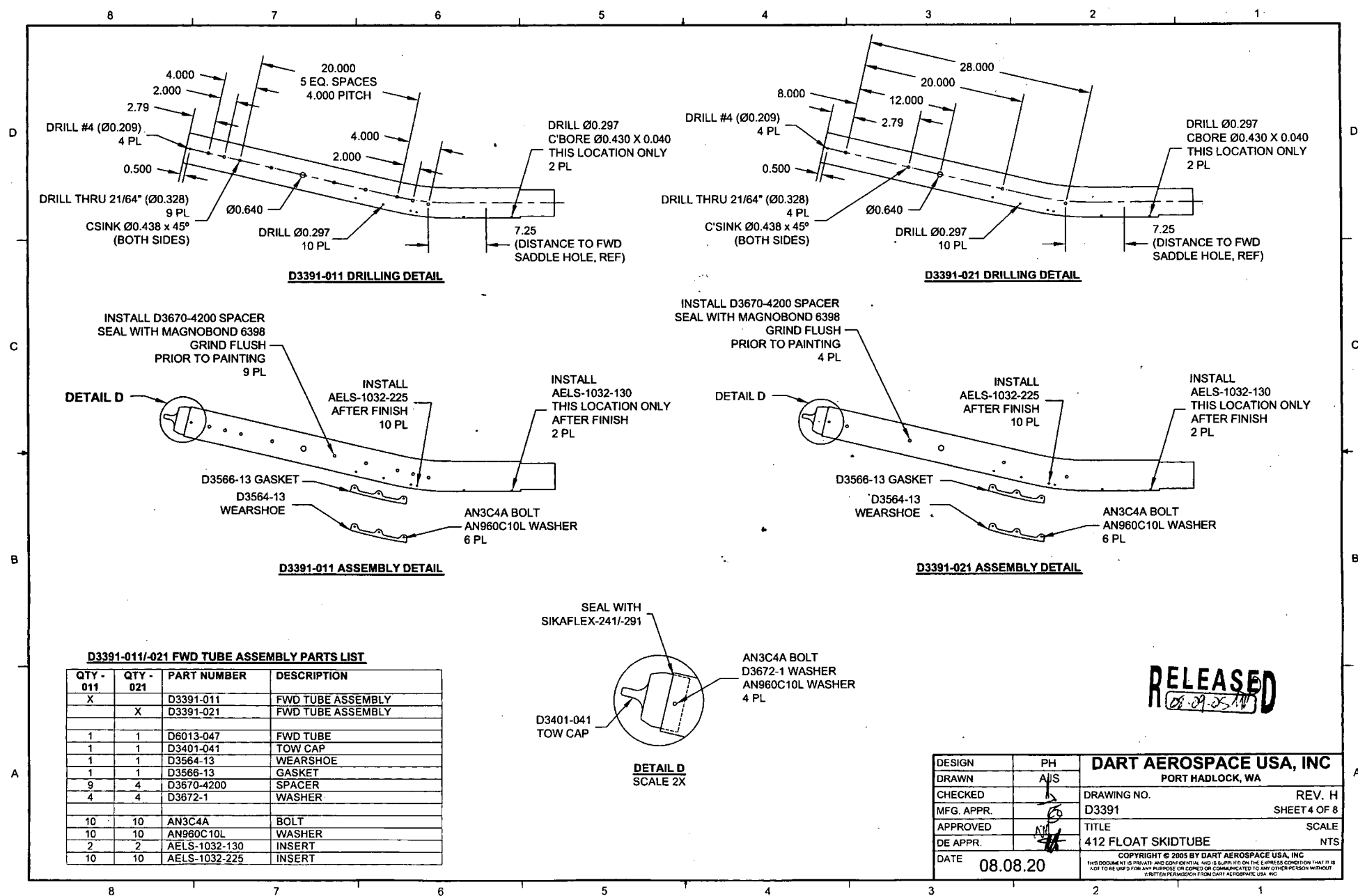


**VIEW Z-Z**  
SCALE 2X

**RELEASED**  
08-05-11

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CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 3 OF 8
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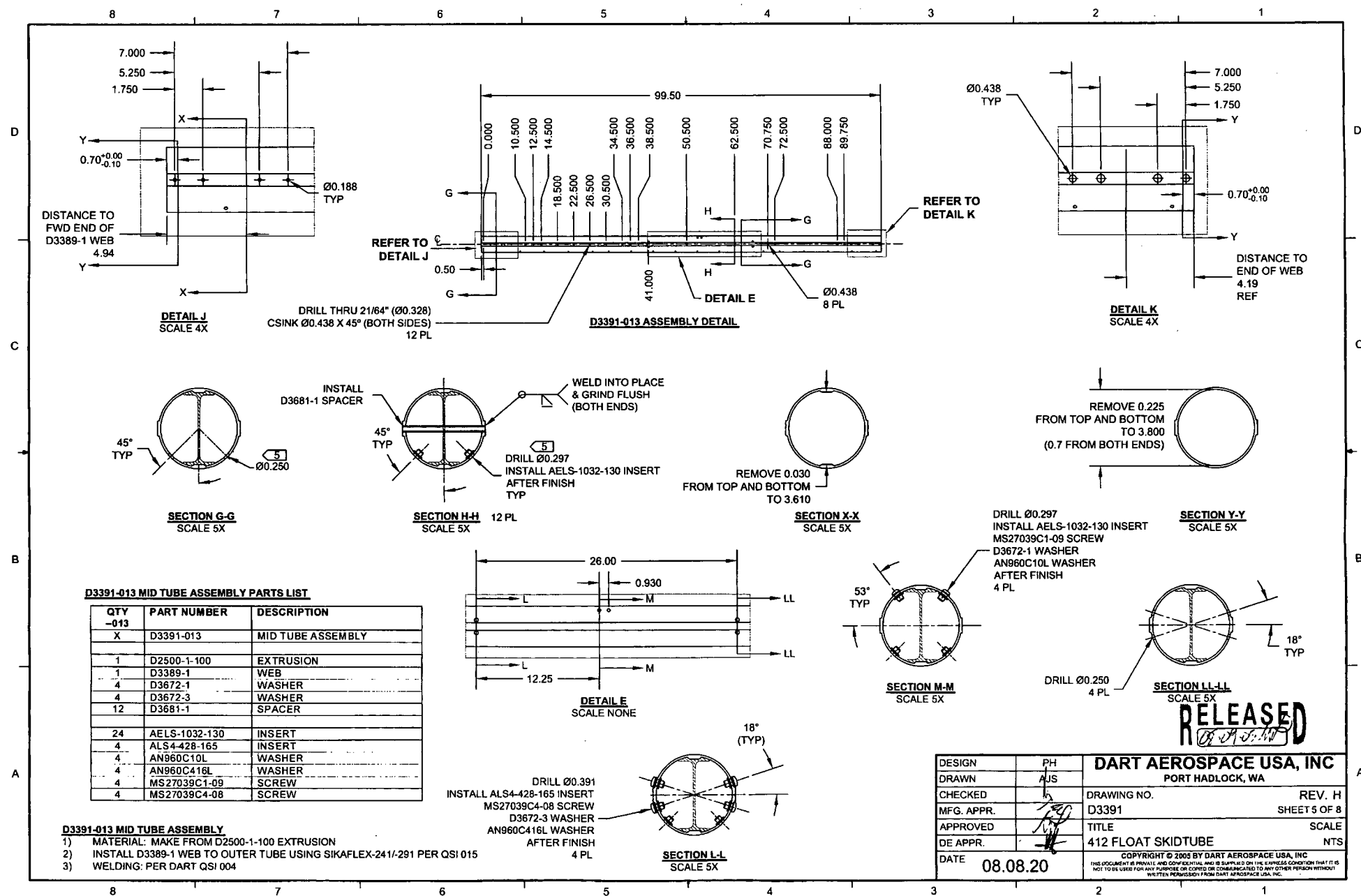


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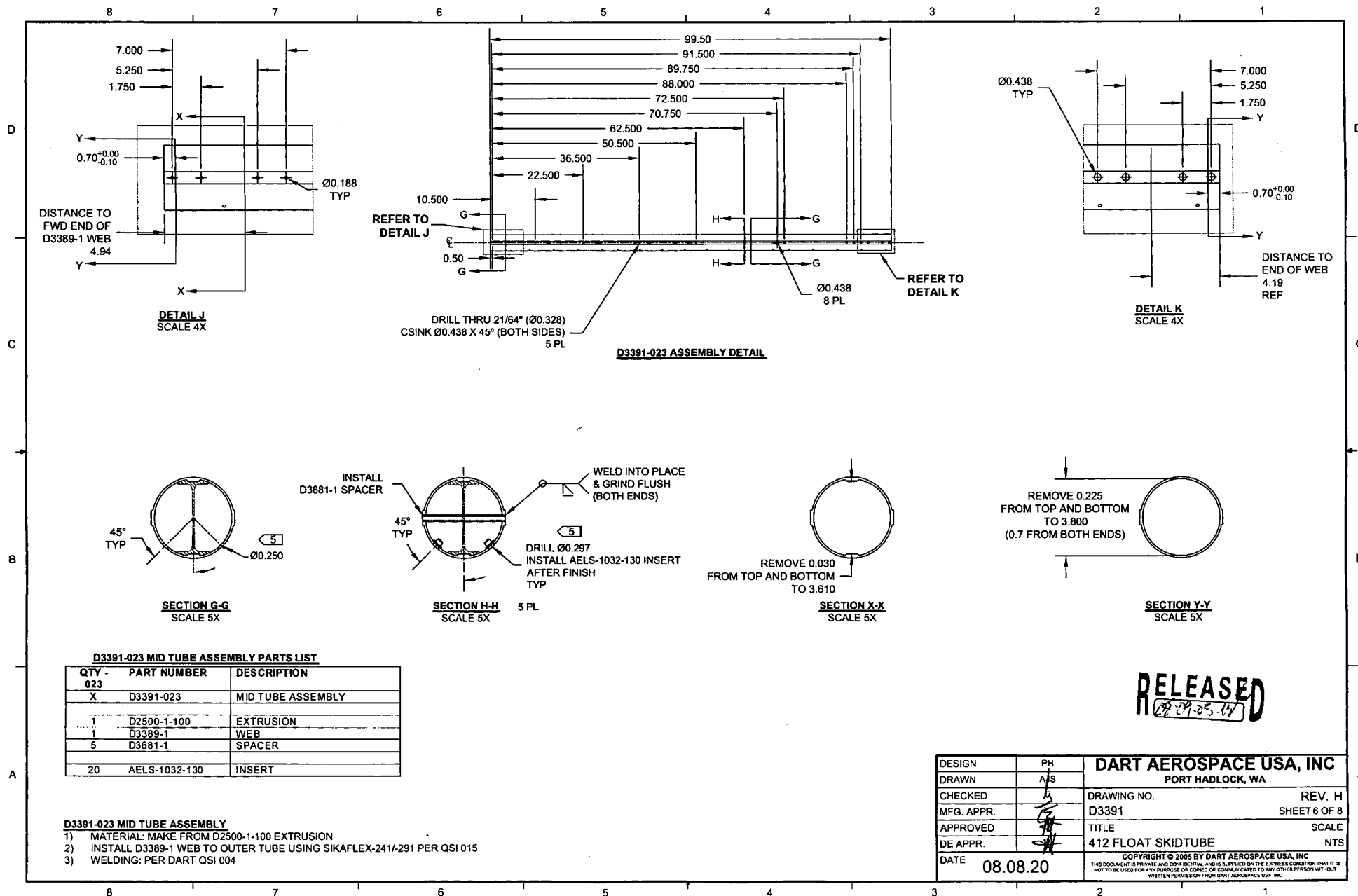
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CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 4 OF 8
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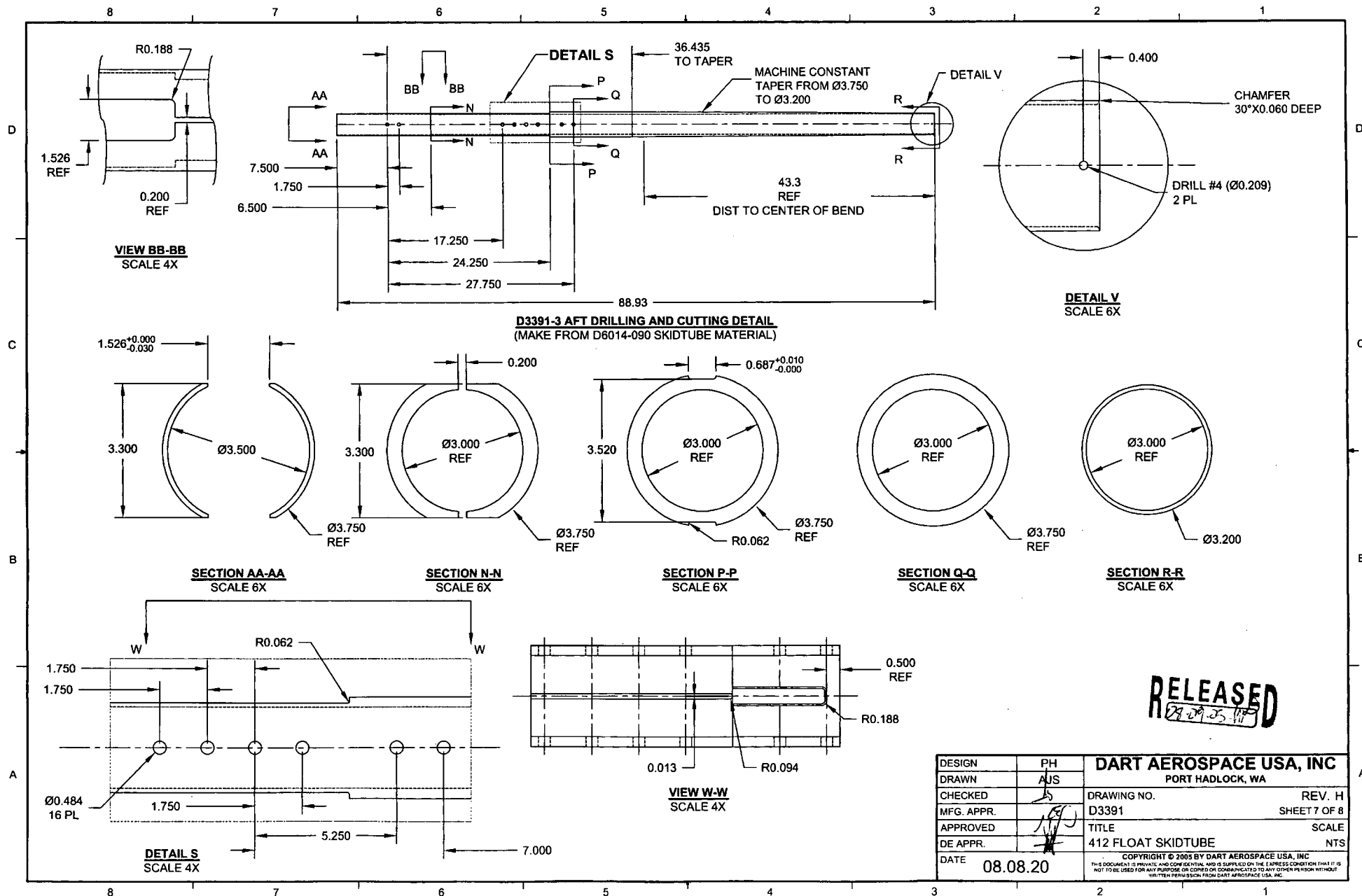
W/0 52784



w/o 52784



w/o 52784



RELEASED  
28-09-25-117

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CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 7 OF 8
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W/O 52784

